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#18

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/554,531A

DATE: 10/17/2002
TIME: 10:22:28

Input Set : A:\238087us.app
Output Set: N:\CRF4\10172002\I554531A.raw

P.6

3 <110> APPLICANT: BEELEY, NIGEL ROBERT ARNOLD
4 PRICKETT, KATHRYN S.
6 <120> TITLE OF INVENTION: NOVEL EXENDIN AGONIST COMPOUNDS
8 <130> FILE REFERENCE: 238/087 US
10 <140> CURRENT APPLICATION NUMBER: 09/554,531A
11 <141> CURRENT FILING DATE: 2000-08-08
13 <150> PRIOR APPLICATION NUMBER: PCT/US98/24273
14 <151> PRIOR FILING DATE: 1998-11-13
16 <150> PRIOR APPLICATION NUMBER: 60/066,029
17 <151> PRIOR FILING DATE: 1997-11-14
19 <160> NUMBER OF SEQ ID NOS: 110
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 39
25 <212> TYPE: PRT
26 <213> ORGANISM: Heloderma horridum
28 <220> FEATURE:
29 <223> OTHER INFORMATION: c-term amidation
31 <400> SEQUENCE: 1
32 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
33 1 5 10 15
35 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
36 20 25 30
38 Ser Gly Ala Pro Pro Pro Ser
39 35
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 39
44 <212> TYPE: PRT
45 <213> ORGANISM: Heloderma suspectum
47 <220> FEATURE:
48 <223> OTHER INFORMATION: c-term amidation
50 <400> SEQUENCE: 2
51 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
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54 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
55 20 25 30
57 Ser Gly Ala Pro Pro Pro Ser
58 35
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 30
63 <212> TYPE: PRT
64 <213> ORGANISM: Homo sapiens
66 <220> FEATURE:

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67 <223> OTHER INFORMATION: c-term amidation
69 <400> SEQUENCE: 3
70 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
71   1           5           10           15
73 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
74   20           25           30
77 <210> SEQ ID NO: 4
78 <211> LENGTH: 39
79 <212> TYPE: PRT
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
84   formula peptide
86 <220> FEATURE:
87 <223> OTHER INFORMATION: c-term may be amidated
89 <220> FEATURE:
90 <221> NAME/KEY: MOD_RES
91 <222> LOCATION: (1)
92 <223> OTHER INFORMATION: His, Arg, Tyr, Ala, Norval, Val or Norleu
94 <220> FEATURE:
95 <221> NAME/KEY: MOD_RES
96 <222> LOCATION: (2)
97 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
99 <220> FEATURE:
100 <221> NAME/KEY: MOD_RES
101 <222> LOCATION: (3)
102 <223> OTHER INFORMATION: Ala, Asp or Glu
104 <220> FEATURE:
105 <221> NAME/KEY: MOD_RES
106 <222> LOCATION: (4)
107 <223> OTHER INFORMATION: Ala, Norval, Val, Norleu or Gly
109 <220> FEATURE:
110 <221> NAME/KEY: MOD_RES
111 <222> LOCATION: (5)
112 <223> OTHER INFORMATION: Ala or Thr
114 <220> FEATURE:
115 <221> NAME/KEY: MOD_RES
116 <222> LOCATION: (6)
117 <223> OTHER INFORMATION: Phe, Tyr or naphthylalanine
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121 <222> LOCATION: (7)
122 <223> OTHER INFORMATION: Thr or Ser
124 <220> FEATURE:
125 <221> NAME/KEY: MOD_RES
126 <222> LOCATION: (8)
127 <223> OTHER INFORMATION: Ala, Ser or Thr
129 <220> FEATURE:
130 <221> NAME/KEY: MOD_RES

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131 <222> LOCATION: (9) /
132 <223> OTHER INFORMATION: Ala, Norval, Val, Norleu, Asp or Glu
134 <220> FEATURE:
135 <221> NAME/KEY: MOD_RES
136 <222> LOCATION: (10)
137 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met
139 <220> FEATURE:
140 <221> NAME/KEY: MOD_RES
141 <222> LOCATION: (11) /
142 <223> OTHER INFORMATION: Ala or Ser
144 <220> FEATURE:
145 <221> NAME/KEY: MOD_RES
146 <222> LOCATION: (12) /
147 <223> OTHER INFORMATION: Ala or Lys
149 <220> FEATURE:
150 <221> NAME/KEY: MOD_RES
151 <222> LOCATION: (13) /
152 <223> OTHER INFORMATION: Ala or Gln
154 <220> FEATURE:
155 <221> NAME/KEY: MOD_RES
156 <222> LOCATION: (14) /
157 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met
159 <220> FEATURE:
160 <221> NAME/KEY: MOD_RES
161 <222> LOCATION: (15) /
162 <223> OTHER INFORMATION: Ala or Glu
164 <220> FEATURE:
165 <221> NAME/KEY: MOD_RES
166 <222> LOCATION: (16) /
167 <223> OTHER INFORMATION: Ala or Glu
169 <220> FEATURE:
170 <221> NAME/KEY: MOD_RES
171 <222> LOCATION: (17) /
172 <223> OTHER INFORMATION: Ala or Glu
174 <220> FEATURE:
175 <221> NAME/KEY: MOD_RES
176 <222> LOCATION: (19) /
177 <223> OTHER INFORMATION: Ala or Val
179 <220> FEATURE:
180 <221> NAME/KEY: MOD_RES
181 <222> LOCATION: (20) /
182 <223> OTHER INFORMATION: Ala or Arg
184 <220> FEATURE:
185 <221> NAME/KEY: MOD_RES
186 <222> LOCATION: (21) /
187 <223> OTHER INFORMATION: Ala or Leu
189 <220> FEATURE:
190 <221> NAME/KEY: MOD_RES
191 <222> LOCATION: (22) /

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Input Set : A:\238087us.app

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192 <223> OTHER INFORMATION: Phe, Tyr or naphthylalanine
 194 <220> FEATURE:
 195 <221> NAME/KEY: MOD_RES
 196 <222> LOCATION: (23)
 197 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met
 199 <220> FEATURE:
 200 <221> NAME/KEY: MOD_RES
 201 <222> LOCATION: (24)
 202 <223> OTHER INFORMATION: Ala, Glu or Asp
 204 <220> FEATURE:
 205 <221> NAME/KEY: MOD_RES
 206 <222> LOCATION: (25)
 207 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine
 209 <220> FEATURE:
 210 <221> NAME/KEY: MOD_RES
 211 <222> LOCATION: (26)
 212 <223> OTHER INFORMATION: Ala or Leu
 214 <220> FEATURE:
 215 <221> NAME/KEY: MOD_RES
 216 <222> LOCATION: (27)
 217 <223> OTHER INFORMATION: Ala or Lys
 219 <220> FEATURE:
 220 <221> NAME/KEY: MOD_RES
 221 <222> LOCATION: (28)
 222 <223> OTHER INFORMATION: Ala or Asn
 224 <220> FEATURE:
 225 <221> NAME/KEY: MOD_RES
 226 <222> LOCATION: (31)
 227 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 228 N-alkylpentylglycine or N-alkylalanine
 230 <220> FEATURE:
 231 <221> NAME/KEY: MOD_RES
 232 <222> LOCATION: (36)..(38)
 233 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine
 234 N-alkylpentylglycine or N-alkylalanine
 236 <220> FEATURE:
 237 <223> OTHER INFORMATION: provided that no more than three of Xaa3, Xaa4, Xaa5, Xaa6,
 238 Xaa8, Xaa9, Xaa10, Xaa11, Xaa12, Xaa13, Xaa14, Xaa15,
 239 Xaa16, Xaa17, Xaa19, Xaa20, Xaa21, Xaa24, Xaa25, Xaa26,
 240 Xaa27 and Xaa28 are Ala
 242 <220> FEATURE:
 243 <223> OTHER INFORMATION: provided also that, if Xaa1 is His, Arg or Tyr, then at
 244 least one of Xaa3, Xaa4 and Xaa9 is Ala
 246 <220> FEATURE:
 247 <223> OTHER INFORMATION: this peptide may encompass 28-39 residues, wherein residues
 248 1-28 are constant and residues 29-39 may vary in length
 249 according to the specification as filed; see specification for
 250 detailed description of substitutions and preferred embodiments
 252 <400> SEQUENCE: 4

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TIME: 10:22:28

Input Set : A:\238087us.app

Output Set: N:\CRF4\10172002\I554531A.raw

W--> 253 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 254 1 5 10 15
 W--> 256 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
 257 20 25 30
 W--> 259 Ser Gly Ala Xaa Xaa Xaa Ser
 260 35
 262 <210> SEQ ID NO: 5
 263 <211> LENGTH: 28
 264 <212> TYPE: PRT
 265 <213> ORGANISM: Artificial Sequence
 267 <220> FEATURE:
 268 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 270 <220> FEATURE:
 271 <223> OTHER INFORMATION: c-term amidation
 273 <400> SEQUENCE: 5
 274 Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 275 1 5 10 15
 277 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 278 20 25
 281 <210> SEQ ID NO: 6
 282 <211> LENGTH: 28
 283 <212> TYPE: PRT
 284 <213> ORGANISM: Artificial Sequence
 286 <220> FEATURE:
 287 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 289 <220> FEATURE:
 290 <223> OTHER INFORMATION: c-term amidation
 292 <400> SEQUENCE: 6
 293 His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 294 1 5 10 15
 296 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 297 20 25
 300 <210> SEQ ID NO: 7
 301 <211> LENGTH: 28
 302 <212> TYPE: PRT
 303 <213> ORGANISM: Artificial Sequence
 305 <220> FEATURE:
 306 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin agonist
 308 <220> FEATURE:
 309 <223> OTHER INFORMATION: c-term amidation
 311 <400> SEQUENCE: 7
 312 His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 313 1 5 10 15
 315 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 316 20 25
 319 <210> SEQ ID NO: 8
 320 <211> LENGTH: 28
 321 <212> TYPE: PRT
 322 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/17/2002
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Input Set : A:\238087us.app
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:4; Xaa Pos. 24,25,26,27,28,31,36,37,38
Seq#:20; Xaa Pos. 6
Seq#:21; Xaa Pos. 6
Seq#:32; Xaa Pos. 10
Seq#:33; Xaa Pos. 10
Seq#:42; Xaa Pos. 14
Seq#:43; Xaa Pos. 14
Seq#:56; Xaa Pos. 22
Seq#:57; Xaa Pos. 22
Seq#:60; Xaa Pos. 23
Seq#:61; Xaa Pos. 23
Seq#:86; Xaa Pos. 31,36,37,38
Seq#:87; Xaa Pos. 36,37,38
Seq#:88; Xaa Pos. 31,36,37
Seq#:89; Xaa Pos. 31,36
Seq#:94; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:94; Xaa Pos. 24,25,26,27,28,29,30,33,38,39,40,41
Seq#:95; Xaa Pos. 1,26
Seq#:96; Xaa Pos. 1,26
Seq#:97; Xaa Pos. 1,26
Seq#:98; Xaa Pos. 1,26
Seq#:99; Xaa Pos. 1,27
Seq#:100; Xaa Pos. 1,27
Seq#:101; Xaa Pos. 1,27
Seq#:102; Xaa Pos. 1,27
Seq#:103; Xaa Pos. 27
Seq#:104; Xaa Pos. 27
Seq#:105; Xaa Pos. 27
Seq#:106; Xaa Pos. 27
Seq#:107; Xaa Pos. 28
Seq#:108; Xaa Pos. 28
Seq#:109; Xaa Pos. 28
Seq#:110; Xaa Pos. 28

VERIFICATION SUMMARY

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L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:32
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:1002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:1281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:16
L:1305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:16
L:1367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:16
L:1391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16
L:1902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:16
L:1905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86 after pos.:32
L:1932 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:32
L:1961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:16
L:1964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:32
L:1993 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:16
L:1996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:32
L:2273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0
L:2276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:16
L:2279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:32
L:2305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0
L:2308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:16
L:2334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:0
L:2337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:16
L:2363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97 after pos.:0
L:2366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97 after pos.:16
L:2392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:0
L:2395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:16
L:2421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0
L:2424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:16
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0
L:2453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:16
L:2479 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0
L:2482 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16
L:2508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0
L:2511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:16
L:2535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:16
L:2559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104 after pos.:16
L:2583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105 after pos.:16
L:2607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:16
L:2631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:16
L:2655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:16
L:2679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16
L:2703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:110 after pos.:16